

# Fact Sheet



## For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-08300019-2012**  
Application Received: **November 2, 2011**  
Plant Identification Number: **03-054-083-00019**  
Permittee: **Columbia Gas Transmission, LLC**  
Facility Name: **Files Creek Compressor Station**  
Mailing Address: **1700 MacCorkle Avenue SE, Charleston, WV 25314**

*Revised: N/A*

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Physical Location:	Beverly, Randolph County, West Virginia
UTM Coordinates:	601.1 km Easting • 4,297.3 km Northing • Zone 17
Directions:	The station is located on Files Creek Road and WV Secondary Route 37/8, approximately 3 miles south of the town of Beverly.

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### Facility Description

The Files Creek Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of six (6) 1,100-hp and four (4) 2,000-hp natural gas fired reciprocating compressor engines, two (2) natural gas fired emergency generators, a wastewater evaporation injection system and numerous storage tanks of various sizes. For comfort heating purposes the facility also operates a number of small space heaters (de minimus).

## Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2011 Actual Emissions <sup>1</sup>
Carbon Monoxide (CO)	272.43	99.10
Nitrogen Oxides (NO <sub>x</sub> )	2,071.29	1,236.79
Particulate Matter (PM <sub>10</sub> )	21.38	Unavailable
Total Particulate Matter (TSP)	21.38	13.23
Sulfur Dioxide (SO <sub>2</sub> )	0.42	0.25
Volatile Organic Compounds (VOC)	77.65	41.47
Hazardous Air Pollutants <sup>2</sup>	Potential Emissions	2011 Actual Emissions <sup>1</sup>
Formaldehyde	30.89	19.01
Total HAPs	37.34	19.01

<sup>1</sup> Actual emissions values were transcribed from the 2012 Certified Emissions Statement (CES) Invoice, and are emissions from January 1, 2011 through December 31, 2011.

<sup>2</sup> The facility has the potential to emit other HAPs, such as: acetaldehyde, benzene, ethylbenzene, ethylene glycol, hexane, toluene, xylene (mixed isomers). Each of these speciated HAPs has potential emissions less than 10 tpy.

## Title V Program Applicability Basis

This facility has the potential to emit 272.43 tpy of CO; 2,071.29 tpy of NO<sub>x</sub>; 30.89 tpy of formaldehyde; and 37.34 tpy of aggregate HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Columbia Gas Transmission's Files Creek Compressor Station is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

## Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR16	NSPS requirements
	45CSR30	Operating permit requirement.
	45CSR34	Emission standards for HAPs
	40 C.F.R. Part 60, Subpart Kb	Tank NSPS after July 23, 1984
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart ZZZZ	RICE MACT
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances

State Only:	45CSR4 45CSR17	No objectionable odors. Particulate Fugitive
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Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

### Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
None	N/A	N/A

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

### Determinations and Justifications

This facility was previously registered under General Permit R30-NGGP-2007 for Natural Gas Compressor Facilities. The Division of Air Quality did not renew the general permit for natural gas compressor facilities, therefore this facility's renewal will be issued as a source-specific permit. The source-specific permit includes various requirements which are potentially applicable to natural gas compressor stations. The applicable requirements column in the Section 1.0 Emission Units Table of the permit indicates which of the requirements in Sections 2.0 through 24.0 are applicable to each emissions unit.

- I. **40 C.F.R. 60 Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.** All tanks (except for tank A12) at Files Creek station are below 75 m<sup>3</sup> in capacity. Since the vessels do not meet applicability criterion at §60.110b(a), this regulation does not apply to these tanks.

Renewal Application Attachment D cites 40 C.F.R §§ 60.110b(b) and 60.116b as being applicable to Tank A12. The application states that the unit is 55,000 gallons in capacity, which is approx. 208.2 cubic meters, and stores liquid less than 3.5 kPa true vapor pressure. 40 C.F.R. §60.110b(b) states "This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 15.0 kPa." Even though Tank A12 is greater than 151 m<sup>3</sup> and is used to store a liquid with a maximum true vapor pressure less than 3.5 kPa, the permittee is required to keep records for the life of the vessel showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel pursuant to applicable requirement §§60.116b(a) and (b).

II. **40 C.F.R. 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.** The facility is a major source of HAPs. Pertinent details concerning each engine are given below. State rule 45CSR34 is cited with the applicable MACT requirements since the facility is a major source of HAPs.

- a. **Engines 00901 through 00910.** Each engine drives an integral compressor potentially at 8,760 hours per year; therefore, they are considered non-emergency engines. The units are spark ignition (SI) 2-stroke lean burn (2SLB) RICE, each rated at either 1,100 hp (00901 through 00906) or 2,000 hp (00907 through 00910). The units were constructed at various dates between 1951 and 1969. The engines are *Existing stationary RICE* since they meet the criteria of §63.6590(a)(1)(i) (*i.e.*, greater than 500 HP; located at major source of HAP; commenced construction before December 19, 2002).

The engines meet the criteria in §63.6590(b)(3)(i) for *Stationary RICE subject to limited requirements* (*i.e.*, existing SI 2SLB stationary RICE > 500 HP located at major source of HAP). In particular, the limited requirements applicable to the engines are that the stationary RICE do not have to meet the requirements of 40 C.F.R. 63 Subpart ZZZZ or of Subpart A of part 63, including initial notification requirements. No further sections or requirements of the regulation are applicable to the engines.

- b. **Engines 009G1 and 009G2.** Each of these units are spark ignition (SI) 4-stroke rich burn (4SRB) emergency engines rated at 306 hp, and constructed in 1951. Each engine is used to drive an electric generator, and are for emergency use. The engines are *Existing stationary RICE* since they meet the criteria of §63.6590(a)(1)(ii). The engines do not meet any of the criteria for limited requirements or NSPS requirements in §§63.6590(b) and (c), respectively. The table below analyzes the regulation requirements and explains how they are incorporated into the renewal operating permit.

Section	Condition	Discussion
<b>Compliance Date</b>		
§63.6595(a)(1)	(1)	The engine is considered “an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.” Therefore, the compliance date is October 19, 2013. Since the compliance date is future at the time of this renewal there is a note at the end of this requirement specifying that all subsequent Subpart ZZZZ requirements are subject to this compliance date.
<b>Emission and Operating Limitations</b>		
§63.6600	None	This section is not applicable since the engine is rated less than 500 brake HP (bhp).
§63.6601	None	This section is not applicable since the engine is not 4SLB.
§63.6602	(2)	This section is applicable since the engine is an existing stationary RICE ≤ 500 bhp located at a major source. Item #6 is applicable to the engines, and is written as a permit condition. Since there are no applicable numerical emission limitations from Subpart ZZZZ, this language from §63.6602 is excluded from the permit. The reference in the footnote 2 of Table 2c is changed from §63.6625(i) to §63.6625(j) since this is the applicable section due to the engine being SI type.

Section	Condition	Discussion
		<p>Note:</p> <p>The applicable requirements of Table 2c, Item #6, are considered “Work Practice Requirements”. These are not the same as emission limitations and operating limitations described elsewhere in the regulation. Emission limitations are items such as reduction of carbon monoxide emissions and limiting the concentration of formaldehyde in the exhaust stream (cf. non-applicable Table 2a of the subpart). Operating limitations are items such as maintaining pressure drop across a catalyst, and maintaining exhaust gas temperature in a specified range (cf. non-applicable Table 2b of the subpart). However, work practices pertain to frequencies of oil changes, inspections of spark plugs and belts and hoses. The notes following Table 2c in the regulation affirm that these requirements are management practice requirements. Based upon these distinctions, all associated MRR requirements in the regulation that pertain to emission limits and operating limits will not be included in the permit since they are not applicable to the engines.</p>
§63.6603(a)	None	This section is not applicable since the engine is not located at an area source.
§63.6603(b)	None	This section is not applicable since the engine is not a CI RICE in Alaska.
§63.6604	None	This section is not applicable since the engine is spark ignition.
<b>General Compliance Requirements</b>		
§63.6605(a)	None	This section is not applicable since the engine is not subject to emission limitations and operating limitations of Subpart ZZZZ.
§63.6605(b)	(3)	This general duty requirement is included in the permit.
<b>Testing and Initial Compliance Requirements</b>		
§63.6610	None	This section is not applicable since the engines are rated less than 500 brake HP.
§63.6611	None	This section is not applicable since the engine is existing.
§63.6612	None	<p>§63.6612(a) is applicable since the engine is an existing stationary RICE <math>\leq 500</math> HP located at a major source. However, no specific requirements in §63.6612 apply to the engine, as is demonstrated below.</p> <p>§63.6612(a) refers to applicable requirements in Table 4 and 5 to Subpart ZZZZ. Item #2 in Table 4 is applicable to 4SRB stationary RICE that are complying with the requirement to reduce formaldehyde emissions. Similarly, Item #3 in Table 4 applies to any stationary RICE complying with the requirement to limit CO or formaldehyde in the exhaust stream. However, the engines are not subject to any requirement to reduce CO or formaldehyde emissions (as discussed above under Emission and Operating Limitations); therefore, testing under §63.6612(a) does not apply.</p>

Section	Condition	Discussion
		§63.6612(b) applies in the case when testing has already been performed. This requirement is not applicable to the engine.
§63.6615	None	This section is not applicable since the engine is not subject to emission limitations and operating limitations under Subpart ZZZZ.
§§63.6620(a) through (i)	None	This section is not applicable since the engine is not subject to emission limitations and operating limitations under Subpart ZZZZ.
§63.6625(a)	None	This section is not applicable since there is no CEMS for the engines.
§63.6625(b)	None	This section is not applicable since there is no CPMS for the engines.
§63.6625(c)	None	This section is not applicable since the engines do not fire landfill gas or digester gas.
§63.6625(d)	None	This section is not applicable since the engine is an existing 4SRB RICE.
§63.6625(e)	(4)	The engine meets the criteria of §63.6625(e)(2), and is therefore required to comply with this section. The language of both §63.6625(e) and §63.6625(e)(2) have been combined for the permit condition. The non-applicable language “or black start” has not been included in the condition.
§63.6625(f)	(5)	The engine meets the criteria of §63.6625(f), and is therefore subject to the requirement. The non-applicable language concerning an area source of HAP emissions has not been included in the condition.
§63.6625(g)	None	This section is not applicable since the engine is emergency SI RICE.
§63.6625(h)	(6)	This section is applicable to the engine since it is existing. However, the language “after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply” will be excluded since the engine is not subject to emission limitations under Subpart ZZZZ.
§63.6625(i)	None	This section is not applicable since the engine is not a CI RICE.
§63.6625(j)	(7)	The oil analysis program is an option mentioned in footnote 2 to Table 2c of Subpart ZZZZ for the applicable work practice standard in Item #6 of Table 2c. The oil analysis program is set forth with non-applicable language excluded.
§§63.6630(a) through (c)	None	<p>§63.6630(a) is not applicable since the engine is not subject to emission and operating limitations from Subpart ZZZZ.</p> <p>§63.6630(b) is not applicable since the engine is not subject to operating limitations from Subpart ZZZZ.</p>

Section	Condition	Discussion
		The NOCS requirement of §63.6630(c) is not applicable since none of the requirements in §§63.6630(a) through (b) are applicable.
<b>Continuous Compliance Demonstration</b>		
§§63.6635(a) through (c)	None	§63.6635(a) is not applicable since the engine is not subject to emission and operating limitations from Subpart ZZZZ.  §§63.6635(b) and (c) are not applicable since the engine is not subject to any continuous monitoring in Subpart ZZZZ.
§63.6640(a)	(4)	Since the engine is subject to requirements of Table 2c of Subpart ZZZZ, this section requires compliance with applicable methods in Table 6 to Subpart ZZZZ. In Table 6, the requirements of Item #9 are applicable to the engine. However, it is the same language as in §63.6625(e). Rather than writing a separate and redundant condition, this section is cited with condition (4).
§63.6640(b)	(8)	This applicable requirement requires the permittee to report deviations from the applicable requirements of Table 2c to Subpart ZZZZ. Non-applicable language in the regulation has not been included in this permit condition (i.e., references to catalyst change-out and reestablishing operating parameters).
§63.6640(c)	None	This section is reserved.
§63.6640(d)	None	This section is not applicable since the engine is existing.
§63.6640(e)	None	Since the engine is an existing emergency stationary RICE, it is not required to meet the requirements in Table 8.
§63.6640(f)(1)	(9)	This section applies to the engines since they are existing emergency stationary RICE located at a major source of HAP emissions.  The first sentence of §63.6640(f)(1)(iii) is applicable in this case. However, the remaining requirements of that paragraph apply to generators that supply power to the electric grid. The engine in this case is not used for this specific purpose; therefore, the non-applicable language is excluded from condition.
§63.6640(f)(2)	None	This section is not applicable since the engine is rated less than 500 brake HP.
<b>Notifications</b>		
§63.6645(a)(5)	None	This section provides an exemption to the notification requirements (including the NOCS under 40 C.F.R. §63.9(h)) for an existing stationary emergency RICE. Since the engine meets these criteria, the notifications under §63.6645 do not apply.
§63.6645(b)	None	This section is not applicable since the engine is rated less than 500 brake HP.
§63.6645(c)	None	This section is not applicable since the engine is existing and rated less than 500 brake HP.

Section	Condition	Discussion
§63.6645(d)	None	This section is not applicable since an initial notification is not required. Requirements for initial notification are in §63.9(b), which is not applicable, in accordance with the determination regarding §63.6645(a)(5).
§63.6645(e)	None	This section is not applicable since the engine is existing.
§63.6645(f)	None	This section is not applicable since an initial notification is not required.
§§63.6645(g) and (h)	None	These sections are not applicable to the engines since no performance tests under Subpart ZZZZ are required.
<b>Reporting</b>		
§§63.6650(a) and (b)	None	These sections are not applicable to the engine since it does not meet any of the criteria in Table 7 to Subpart ZZZZ. In particular, each engine type in Table 7 are non-emergency. The permittee's engine is emergency type.
§63.6650(c)	None	This section is not applicable since it pertains to Compliance Reports, which are not required for the engines since they meet none of the criteria in Table 7 to Subpart ZZZZ (cf. §63.6650(a)).
§63.6650(d)	None	This section is not applicable since it pertains to Compliance Reports, which are not required for the engines since they meet none of the criteria in Table 7 to Subpart ZZZZ (cf. §63.6650(a)). Furthermore, this section is not applicable since the engine is not subject to emissions and operating limitations from Subpart ZZZZ.
§63.6650(e)	None	This section is not applicable since the engine is not subject to emissions and operating limitations from Subpart ZZZZ.
§63.6650(f)	(10)	This section is an applicable requirement to report deviations (as defined in 40 C.F.R. §63.6675). This requirement is modified for coherence in the renewal permit.
§63.6650(g)	None	This section is not applicable since the engine is existing and does not fire landfill gas or digester gas.
<b>Recordkeeping</b>		
§63.6655(a)	None	This section does not apply since the engine is not subject to emission and operating limitations.
§63.6655(b)	None	This section does not apply since neither CEMS nor CPMS are employed for the engine.
§63.6655(c)	None	This section is not applicable since the engine is existing and does not fire landfill gas or digester gas.
§63.6655(d)	None	This section does not apply since the engine is not subject to emission and operating limitations.
§63.6655(e)	(11)	This section requires demonstration of continuous compliance using recordkeeping of the information required by §63.6625(e) and §63.6625(e)(2). The engine is existing stationary emergency RICE located at a major source; therefore, it meets the criteria of §63.6655(e)(2).

Section	Condition	Discussion
		Hence, this recordkeeping requirement has been written in the permit. The regulation language “any of the following stationary RICE” in the last sentence has been replaced with the applicable language “an existing stationary emergency RICE.”
§63.6655(f)	(12)	The engines meet the criteria of §63.6655(f)(1); therefore, this section is applicable. The language of both §63.6655(f) and §63.6655(f)(1) have been combined to create one coherent and applicable condition. Non-applicable language regarding “demand response” is excluded from the condition.
§63.6660(a), (b), and (c)	(13)	These applicable requirements have been written in the permit.
<b>General Provisions</b>		
§63.6665	(14)	The engine does not meet any of the exemption criteria of this section. A condition has been written that will IBR the applicable requirements of Table 8 to Subpart ZZZZ.

### Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 40 C.F.R. 60 Subparts K,Ka; *Standards of Performance for Storage Vessels for Petroleum Liquids* - All tanks (except for tank A12) at Files Creek station are below 40,000 gallons in capacity. Tank A12 does not store petroleum liquids, hence it is exempt.
- b. 40 C.F.R. 60 Subpart KKK; *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* - Files Creek station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.
- c. 45CSR21- *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*: This facility is not located in one of the affected counties.
- d. 45CSR27- *To Prevent and Control the Emissions of Toxic Air Pollutants*: Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment “used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.”
- e. Since the last Title V modification WVDEP has determined that 45CSR10 does not apply to natural gas-fired engines.
- f. 40 CFR 64 - Engines and tank (A12) do not have any add-on control; therefore, in accordance with 40 C.F.R § 64.2(a)(2), CAM is not applicable to these sources.
- g. 40 C.F.R. 60 Subpart JJJJ - *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*. None of the engines at the facility meet the construction or reconstruction date criteria in 40 C.F.R. §60.4230; therefore, this regulation does not apply to the engines at the facility.
- h. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule. The facility has not made any changes that trigger a PSD modification; therefore, the requirements of the GHG tailoring rule are non-applicable.

### **Request for Variances or Alternatives**

None.

### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

### **Comment Period**

Beginning Date: September 14, 2012  
Ending Date: October 15, 2012

All written comments should be addressed to the following individual and office:

Denton B. McDerment, PE  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

### **Point of Contact**

Denton B. McDerment, PE  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1221 • Fax: 304/926-0478

### **Response to Comments (Statement of Basis)**

(Choose) Not applicable.

**OR**

Describe response to comments that are received and/or document any changes to the final permit from the draft/proposed permit.